Section 1. Registration Information

Source Identification

Facility Name:	MGC Pure Chemicals America, Inc.
Parent Company #1 Name:	Mitsubishi Gas Chemical Company, Inc.
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	First-time submission
Subsequent RMP Submission Reason:	
Description:	
Receipt Date:	16-Dec-2009
Postmark Date:	16-Dec-2009
Next Due Date:	16-Dec-2014
Completeness Check Date:	16-Dec-2009
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0021 0087
Other EPA Systems Facility ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	959948027
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	6560 S. Mountain Road
Street 2:	
City:	Mesa
State:	ARIZONA
ZIP:	85212
ZIP4:	
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.292220
Longitude (decimal):	-111.591940
Lat/Long Method:	Interpolation - Digital map source (TIGER)
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	World Geodetic System of 1984
Source Map Scale Number:	

Owner or Operator

Operator Name:	MGC Pure Chemicals America, Inc.
Operator Phone:	(480) 987-9100

Mailing Address

Operator Street 1:	6560 South Mountain Road
Operator Street 2:	
Operator City:	Mesa
Operator State:	ARIZONA
Operator ZIP:	85212
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Gene Tokraks
RMP Title of Person or Position:	Safety Manager
RMP E-mail Address:	gtokraks@mgcpure.com

Emergency Contact

Emergency Contact Name:	Jim Rose
Emergency Contact Title:	Production Manager
Emergency Contact Phone:	(480) 987-9100
Emergency Contact 24-Hour Phone:	(480) 225-1620
Emergency Contact Ext. or PIN:	106
Emergency Contact E-mail Address:	jrose@mgcpure.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(480) 987-9100
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Maricopa County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	47
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	Yes
Air Operating Permit ID:	000126

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	12-May-2009
Last Safety Inspection Performed By an External Agency:	Fire Department

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	APSM
Preparer Phone:	(866) 866-8730
Preparer Street 1:	101 East 400 North
Preparer Street 2:	
Preparer City:	Springville
Preparer State:	UTAH
Preparer ZIP:	84663
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000014701
Description:	Chemical Preparation
Process Chemical ID:	1000017062
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (conc 20% or greater)
CAS Number:	7664-41-7
Quantity (lbs):	95604
CBI Claimed:	
Flammable/Toxic:	Toxic

Process ID:	1000014701
Description:	Chemical Preparation
Process Chemical ID:	1000017061
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	52428
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000014701
Process NAICS ID:	1000015043
Program Level:	Program Level 3 process
NAICS Code:	32599
NAICS Description:	All Other Chemical Product and Preparation Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000011912

Percent Weight:	99.9
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000013050

Percent Weight:	24.0
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	

Toxic Alter ID: 1000013040

Percent Weight:	99.9
Physical State:	Liquid
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	Yes
Other Type:	Vapor Suppression system installed

Active Mitigation Considered

Sprinkler System:	Yes
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	

Emergency Shutdown:	Yes
Other Type:	Canopy over tank

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

The accidental release prevention program is based on the following elements; MGC Pure is in compliance with OSHA PSM requirements:
1) High level of training of the operators, 2) Preventative maintenance programs, 3) Use of accurate and effective reporting procedures, 4) Performance of process hazard analysis of equipment and procedures, 5) Implementation of an auditing and inspection program. Employee participation in all PSM/RMP elements is key to the prevention program implemented and documented MGC Pure facility in Mesa, AZ.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000014122
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7
Prevention Program Level 3 ID:	1000012074
NAICS Code:	32599

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	14-Dec-2009

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	10-Dec-2008

The Technique Used

What If:	
Checklist:	
What If/Checklist:	Yes
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes

Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	Yes
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	
Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	Yes
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	e-stop buttons installed

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	08-Dec-2009

Training

Training Revision Date (The date of the most recent review or revision of training programs):	21-Oct-2009

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	
Demonstration:	
Observation:	
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	08-Dec-2009
Equipment Inspection Date (The date of the most recent equipment inspection or test):	11-Nov-2009
Equipment Tested (Equipment most recently inspected or tested):	Control panel and valves including instrumentation

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	

Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	15-Dec-2009

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	15-Dec-2009

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	10-Dec-2009

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	10-Dec-2009
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	06-Feb-2009

Confidential Business Information

CBI Claimed:	

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	
Healthcare (Does facility's ER plan include information on emergency health care?):	

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Mesa Fire Department
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(480) 644-2211

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	
Clean Water Regulations at 40 CFR 112:	
RCRA Regulations at CFR 264, 265, and 279.52:	
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

MGC Pure Chemicals America, Inc
Mesa, AZ
EPA Risk Management Program Executive Summary

1. Accidental Release Prevention and Emergency Response Polices

MGC Pure complies with applicable federal, state and local regulations. This facility has a formal worker safety program. All employees are informed of hazards in the workplace. Employees who work with potentially hazardous substances receive proper training in the handling of those substances. This facility has procedures in place to safely remove employees from areas in the unlikely event that a hazardous substance release were to occur, and to put in place emergency notification and response procedures.

2. Facility and Regulated Substances

The MGC Pure facility is located in Mesa, AZ. This facility produces ultra-pure ammonium hydroxide. The regulated substances at this facility, anhydrous ammonia, and ammonium hydroxide are used in a delivery system to create ultra pure ammonium hydroxide.

3. Worst-Case and Alternate-Case Release Scenarios

Please reference onsite data (Volume 1: Risk Management Plan) at the MGC Pure facility for offsite consequence analysis data.

4. General Accidental Release Prevention Program and Ammonia Specific Prevention

MGC Pure complies with the OSHA Process Safety Management for Highly Hazardous Chemicals (PSM) standard relative to ammonia. Therefore, this facility has programs to ensure proper operation and maintenance of the ammonia supply and delivery systems. Further, delivery system operators have been trained and are knowledgeable in the safe operation of the system.

The ammonia delivery system at this facility has been designed and constructed using good engineering practices and to conform to industry standards. The system includes ammonia detection devices, an emergency shutdown switch located in the DCS logic, alarms actuated by high release concentrations of ammonia, and safety relief valves to avert serious system overpressure. Periodic maintenance on the ammonia system is ensured via the use of a computerized maintenance management system.

5. Five Year Accident History

During the past five years this facility has had no significant accidental releases of ammonia.

6. Emergency Response Program

This facility has procedures in place to respond to the release of a hazardous substance. Employees are trained to evacuate their respective areas in accordance with OSHA 1910.38(a). Coordination with the local fire department is initiated during an emergency situation. The Maricopa County LEPC has been notified regarding the emergency action plan and of the potential nature of an anhydrous ammonia release.

7. Planned Changes to Improve Safety

This facility expects to improve safety performance by emphasizing all elements of a PSM/RMP program. All recommendations during the Process Hazard Analysis were designed to improve the safety performance of the ammonia process. The MGC Pure facility expects to evaluate each recommendation in a timely manner and implement, as soon as possible, those recommendations that will reduce the possibility of a release and/or mitigate the consequences of an unintentional release.